

## CLAIMS

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A perfluoro compounds decomposition method which comprises bringing a gas containing perfluoro compounds under heating into contact with a solid reactant, thereby fixing the fluorine component on said reactant, characterized in that said reactant contains an alkaline earth metal compound and aluminum oxide.

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2. A reactant for decomposition of perfluoro compounds, which contains an alkaline earth metal compound and aluminum oxide.

- 3 A reactant for decomposition of perfluoro compounds, according to claim 2, in which said alkaline earth metal compound is magnesium oxide.

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4. A perfluoro compounds decomposition apparatus which comprises a reaction section filled with a solid reactant, gas flow passages capable of feeding a gas containing perfluoro compounds to said reaction section and of discharging a gas left after the reaction, and heating means for heating said reaction section or the gas to be fed to the same reaction section, characterized in that said reactant is a reactant for decomposition of perfluoro compounds according to claim 2 or 3.

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